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DATA ANALYSIS REPORT: Ramen Ratings

*Understaning Data Through Functions of Excel*

Creating and Analyzing Pivot Tables:

Table 1:

A screenshot of a computer

Description automatically generated

Creating Pivot Tables is not only essential knowledge for analyzing data, but it also is a simple Excel function that allows data to be categorized in patterns. Here are steps I used to create the pivot table in the graph above:

1. Select all cells in your table or range.
2. Select insert pivot table.
3. Choose the location you want the table.
4. Choose various fields for the table.
5. Drag fields to select areas and arrange data.

As seen in the graph above, I selected brands, variety, style, country, and ratings to be organized in the pivot table. I chose these rows because it reflected my original documentation in assignment 1.

Table 2:

A screenshot of a computer

Description automatically generated

Even though pivot tables organize all listed data, not all data is needed. For my assignment, I wanted to focus mainly on categorizing brand name and packaging. I used the ratings as a measure of control to decide which brand and packaging had the best tasting ramen. I was debating on whether to filter out country or not. But, for this data set I decided not to because it did not have an impact on packaging or brand name. I set the value of rating as a sum and changed the variety to count of rating to gather the information I wanted.

Table 3:

A screenshot of a computer

Description automatically generated

Afterwards, this is what my pivot table looked like. Now, I have an organized pivot table of the information I wanted and was able to filter through the information I did not.

Creating and Analyzing Pivot Charts:

Table 1:

A screenshot of a computer

Description automatically generated

Creating pivot charts are commonly used for representing and visualizing raw data. To create a pivot chart, I selected a cell from the pivot table, and analyzed the table to a chart using Excel’s pivot chart analysis function. I selected the table from my previous table and computed it into a chart.

If I did not already have the pivot table, I could still gather the information I wanted by:

1. Selecting a cell in the range from my graph in assignment 1.
2. Click Insert function then select pivot chart.
3. Choose the desired location for the chart.
4. Select the fields to display in the pivot chart.

Table 2:

A screenshot of a computer

Description automatically generated

For table 2, I wanted to add axis titles. Just like the name, these functions allow for the graph purpose to be identified easily by any viewer to determine to subject of the chart. An axis title shows what data is being shown on the X and/or Y axis. For my vertical Y-axis I entered the ‘Sum of Ratings’ because that is what I wanted to show on the graph. The graph lists the sum in order of 0 to 12 depending on the brand and packaging reviews. On the X- axis I entered ‘Brand Names’ because it displayed the company names along w a color-coated description of the variety type.

Table 3:

A screenshot of a computer

Description automatically generated

Table 3 pictures the display of the legend function on the chart element. Using the chart element will allow multiple functions of this chart to be changed. Originally the graph automatically placed the legend position to the top right of the graph, but I wanted it to be placed at the bottom as a simplicity value. I left the color on automatic because I did not want to draw too much focus on this display and there was no need to highlight it. However, on the legend function you can decide what position, color, and outline desired.

Table 4:

A screenshot of a computer

Description automatically generated

Table 4 demonstrates the formatting of data labels. Under the design tool, I selected the ‘add element chart’ function to select data labels. From there I was able to arrange the look, placement, and what description needed to be used. The image shown demonstrates the automatic arrange of data. I messed around with it a bit to see which alignment I wanted to make my chart easier to read and more organized. I had altered the placement to rise above the charts and point to the colored blocks; however, this seemed really cluttered and was confusing to navigate (as seen in Table 5).

Table 5:

A screenshot of a computer

Description automatically generated

Table 5 portrays how cluttered my chart was when I was trying to arrange how I wanted it to be organized.

Table 6:

A screenshot of a computer

Description automatically generated

To clear up the clutter, I deleted the value name because it was repetitive and made my graph more confusing. This can simply be done by using the chart element function and selecting ‘more data label options.’ From there I was able to select the numerical value to show the information that my chart needed, and I was able to deselect the category name to clear up repetitiveness and clutter. Since I removed category name, I added the legend key to create a function of placing a color-coated square outside of the displayed function to draw the same output on an easy-to-read graph.